

REMARKS

After entry of this amendment, claims 1, 9-24, 26-41, 43-62, and 66-81 will be pending for the Examiner's review and consideration. The Applicant would first like to thank the Examiner for the allowance of claims 43-61. The Office Action dated July 14, 2004 has been carefully considered. Claims 1, 11-14, 23, 26-29, 31-33, and 62 have been amended. Claims 66-81 have been added. Claims 2-6, 25, 42, and 63-65 have been canceled without prejudice. Claims 7 and 8 were previously canceled without prejudice. No new matter has been added. Reconsideration and allowance of the present application in view of the above amendments and the following remarks is respectfully requested.

In the Office Action dated July 14, 2004, the Examiner:

- rejected claims 1-6, 11, 12, 15-17, 19-22, 24-31, 34-36, 38, 39, 41, 42, and 62-65 under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 5,364,399 to Lowery *et al.* ("Lowery");
- rejected claims 9, 10, 13, 14, 32, and 33 under 35 U.S.C. § 103(a) as being unpatentable over Lowery; and
- allowed claims 43-61.

Independent Claim 1

Independent claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by Lowery. Independent claim 1, as amended, recites, *inter alia*, a bone fixation assembly comprising a bone fastener comprising at least one collar having a top surface, a bottom surface and a lateral sidewall extending between the top surface and the bottom surface, the intersection of the lateral sidewall with the bottom surface forming a substantially sharp edge and a receiving member comprising at least one bore that defines an inner surface having a first portion and a concave second portion, wherein the sharp edge of the at least one collar contacts the concave second portion of the receiving member. It is respectfully submitted that Lowery does not disclose, teach, or suggest a bone fastener having a collar with a sharp edge wherein the sharp edge contacts the concave second portion of a receiving member. Rather, Lowery discloses a bone engaging screw having an enlarged head 32 and an elongated shank 31 wherein the head 32 includes a truncated spherical upper surface 33a and an *oppositely spherically cut lower surface 34*. The lower surface 34 being curved to match the curvature of the spherical recess 28 formed in the plate 20. Therefore it is respectfully submitted that Lowery does not disclose, teach, or suggest a bone fastener having a sharp edge for contacting the concave portion of a receiving member. Thus, it is respectfully submitted, that Lowery does not disclose, teach, or suggest all of the limitations

of independent claim 1. Withdrawal of this rejection and allowance of independent claim 1 is therefore respectfully requested.

Claims 9-24, and newly added claims 66-81 all ultimately depend from independent claim 1, and thus, it is respectfully submitted that these claims are equally allowable for at least this reason. Withdrawal of these rejections and allowance of claims 9-24 and 66-81 is therefore respectfully requested.

Independent Claim 26

Independent claim 26 was rejected under 35 U.S.C. § 102(b) as being anticipated by Lowery. Independent claim 26, as amended, recites, *inter alia*, a device for osteosynthetic bone fixation comprising a bone fastener comprising a plurality of collars, each collar having a top planar surface, a bottom planar surface and a lateral sidewall extending between the top surface and the bottom surface, the intersection of the lateral sidewall with the bottom surface forming a substantially sharp edge and a receiving member comprising at least one bore that defines an inner surface with a first cylindrical portion and a second non-cylindrical portion, wherein the sharp edges of the collars abut the non-cylindrical portion at a selectable angle. It is respectfully submitted that Lowery does not disclose, teach, or suggest a bone fastener having a plurality of collars wherein each collar has a sharp edge which contacts the non-cylindrical portion of a receiving member. Rather, as previously stated, Lowery discloses a bone engaging screw having an enlarged head 32 and an elongated shank 31 wherein the head 32 includes a truncated spherical upper surface 33a and an oppositely spherically cut lower surface 34. The lower surface 34 being curved to match the curvature of the spherical recess 28 formed in the plate 20. Therefore it is respectfully submitted that Lowery does not disclose, teach, or suggest a bone fastener having a plurality of sharp edges for contacting the non-cylindrical portion of a receiving member. Thus, it is respectfully submitted, that Lowery does not disclose, teach, or suggest all of the limitations of independent claim 26. Withdrawal of this rejection and allowance of independent claim 26 is therefore respectfully requested.

Claims 27-41 all ultimately depend from independent claim 26, and thus, it is respectfully submitted that these claims are equally allowable for at least this reason. Withdrawal of these rejections and allowance of claims 27-41 is therefore respectfully requested.

Independent Claim 62

Independent claim 62 was rejected under 35 U.S.C. § 102(b) as being anticipated by Lowery. Independent claim 62, as amended, recites, *inter alia*, a bone fixation assembly

comprising a bone fastener comprising a plurality of disk-shaped collars, each collar having a top surface, a bottom surface and a lateral sidewall extending between the top surface and the bottom surface, the intersection of the lateral sidewall with the bottom surface forming a substantially sharp edge and a receiving member comprising at least one bore that defines an inner surface with a first cylindrical portion and a second non-cylindrical portion, wherein each of the sharp edges contacts the second non-cylindrical portion. It is respectfully submitted that Lowery does not disclose, teach, or suggest a bone fastener having a plurality of disk-shaped collars wherein each collar has a sharp edge which contacts the non-cylindrical portion of a receiving member. Rather, as previously stated, Lowery discloses a bone engaging screw having an enlarged head 32 and an elongated shank 31 wherein the head 32 includes a truncated spherical upper surface 33a and an *oppositely spherically cut lower surface 34*. The lower surface 34 being curved to match the curvature of the spherical recess 28 formed in the plate 20. Therefore it is respectfully submitted that Lowery does not disclose, teach, or suggest a bone fastener having a plurality of sharp edges for contacting the non-cylindrical portion of a receiving member. Thus, it is respectfully submitted, that Lowery does not disclose, teach, or suggest all of the limitations of independent claim 62. Withdrawal of this rejection and allowance of independent claim 62 is therefore respectfully requested.

In light of the above amendments and remarks, it is respectfully submitted that claims 1, 9-24, 26-41, 43-62, and 66-81 are now in condition for allowance, and the Examiner is respectfully requested to reconsider this application with a view towards allowance. The Examiner is invited to call the undersigned attorney at 212-326-7883, if a telephone call could help resolve any remaining issues.

Date: October 14, 2004

Respectfully submitted,

Giuseppe Molaro
By: Giuseppe Molaro

52,039

(Reg. No.)

35,340

(Reg. No.)

For: Brian M. Rothery
JONES DAY
222 East 41st Street
New York, New York 10017
(212) 326-3939

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